UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/353,383	07/15/1999	TOSHIHIRO SHIMA	Q55113	3442

7590	08/10/2006

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EXAMINER
POON, KING Y

ART UNIT	PAPER NUMBER
2625	

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 May 2006*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

    4a) Of the above claim(s) *1-10 and 21-36* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 November 2003 and 21 September 1999* is/are: a)☒ accepted or b)☐ objected to by
the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date *9/14/2005*.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   In view of the appeal brief filed on 5/26/2006, PROSECUTION IS HEREBY

REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the

following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply

under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed

by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and

appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth

in 37 CFR 41.20 have been increased since they were previously paid, then appellant

must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by

signing below.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the
United States before the invention thereof by the applicant for patent, or on an international application
by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this
title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior

to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3.   Claims 11, 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishi

(US 6,075,616).

Regarding claims 11: Nishi teaches a printer (fig. 1) comprising: a job request

section (CPU 101, column 6, lines 25-50) for demanding job data (the ready signal is a

signal to the host to send data, column 6, lines 45-50; working in contrary with the

output wait signal, 16, fig. 4) of a print job from a host computer (host, 17, fig. 4) having

said job data; a printing section (100, fig. 1) for receiving and printing said job data sent

from said host computer in response to a request from said job request section, a print

engine (engine, fig. 1); and a receive buffer memory (103, fig. 1, fig. 2), wherein said job

request section sends said job request to said host computer according to a condition of

said print engine and said receive buffer memory (12, 15, fig. 4).

Regarding claim 16: Nishi teaches a method of operating a printer, comprising

the step of: demanding (the ready signal is a signal to the host to send data, column 6,

lines 45-50; working in contrary with the output wait signal, 16, fig. 4) job data of a print

job from a host computer (host, 17, fig. 4) having said job data; and receiving and

printing (column 6, lines 22-29, column 8, lines 35-45) said job data sent from said host

computer in response to a job request of said demanding step, wherein said job request

is sent to said host computer according to a condition of a print engine and a receive

buffer memory of said printer (12, 15, fig. 4).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 11-13, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Gase (US 6,184,996) in view of Nishi (US 6,075,616)

Regarding claim 11: Gase teaches a printer (printer 14, column 3, line 12)

comprising: a job request section (the software code of the browser program that

request print job, column 3, lines 25-30) for demanding job data (text of print job,

column 3, lines 25-30) of a print job from a host computer (client processor, column 3,

lines 27, that the print job is located, column 3, lines 5-8) having the job data; and a

printing section (the software code of the program of the printer that controls the printer

to received the transmitted text of a print job, column 3, lines 25-30, and the software

code that controls the printer to print the text) for receiving and printing the job data sent

from the host computer in response (response, column 3, line 29) to a request (request,

column 3, line 27) from the job request section.

Note: Column 5, lines 1-10, Gase teaches the printer is controlled by software

procedures. It is inherent that different procedures of the printer are controlled by

different software code.

Although it is would have been obvious that Gase must have a memory/buffer for storing the received print data to prevent the print data from being lost in the printer before the print data is being printed and must have a physical print device/engine for putting ink onto print media based on the received print data; it is also obvious that the printer would not send out the print request when the printer is not capable of receiving any print data, Gase does not specifically disclosed such details within the printer - a print engine, a receive buffer memory, and wherein the job request section sends said job request to the host computer according to a condition of the engine and the receive buffer memory.

Nashi, in the same area using a printer for printing, shows the detail of a printer having a print engine, (200, fig. 1) a receive buffer memory, (103, fig. 1, fig. 2) and wherein said job request section sends said job request (17, fig. 4) to said host computer according to a condition of said print engine and said receive buffer memory (12, 15, fig. 4).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: a print engine, a receive buffer memory, and wherein the job request section sends said job request to the host computer according to a condition of the engine and the receive buffer memory.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer by the teaching of Nashi because of the following reasons: (a) it would have provided a hardware device/print

engine to carry out the printing; (b) it would prevent the data from being lost by using a

buffer; and (c) it would also prevent the host from sending print data to the printer while

the printer is not capable of receiving any print data due to print engine error or memory

full as suggested by Nishi, fig. 4.

Regarding claim 12: Gase teaches wherein the job request section receives job

location data (received URL, column 3, lines 15-20) showing a location of the job data

(column 3, lines 18-20) from a print server, (the computer that generates the URL

message other than the computer where the print job resided, column 3, lines 18-21,

column 3, lines 5-9; each client processor is a print server, column 3, lines 1-4, that

serves the printer's request, column 1, lines 41-45, column 3, lines 25-30) and the job

request section sends a job request (request, column 3, line 27) to the host computer

(client processor, column 3, lines 27, that the print job is located, column 3, lines 5-8)

which the job location data shows (column 3, lines 15-30).

Regarding claim 13: Gase teaches the printer further comprising a print server

(job queue 28, column 3, lines 24) for receiving job location data (URL, column 3, line

30-35) showing a location (located, column 3, line 28) of the job data (text of print job,

column 3, line 27, column 3, line 29) from the host computer (client processor, column

3, lines 27, that the print job is located, column 3, lines 5-8) and temporarily storing it,

(since the print job is stored in the queue as URLs, column 3, lines 30-35, and the print

job/URL in the queue would be canceled, column 4, lines 37-40, the storing of the URLs

are temporarily) wherein the job request section (the software code of the browser

program that request print job, column 3, lines 25-30) sends the job request (column 3,

lines 25-30) to the host computer (client processor, column 3, lines 27, that the print job

is located, column 3, lines 5-8) which the job location data (URL, column 3, lines 24-26)

stored in the print server (job queue 28, column 3, lines 24) shows.

Regarding claim 16: Gase teaches a method of operating a printer, (printer 14,

column 3, line 12) comprising steps of demanding job data (sending job request, column

3, lines 25-30) of a print job from a host computer (client processor that sends the text

of a print job, column 3, lines 25-30) having the job data (text of a print job, column 3,

lines 29-30); and receiving and printing the job data (column 3, lines 28-30) sent from

the host computer (client, column 3, line 28) in response to a job request (request,

column 3, line 27) of the demanding step.

Although it is would have been obvious that Gase must have a memory/buffer for

storing the received print data to prevent the print data from being lost in the printer

before the print data is being printed and must have a physical print device/engine for

putting ink onto print media based on the received print data; it is also obvious that the

printer would not send out the print request when the printer is not capable of receiving

any print data, Gase does not specifically disclosed such details within the printer - a

print engine, a receive buffer memory, and wherein the job request section sends said

job request to the host computer according to a condition of the engine and the receive

buffer memory.

Nashi, in the same area using a printer for printing, shows the detail of a printer

having a print engine, (200, fig. 1) a receive buffer memory, (103, fig. 1, fig. 2) and

wherein said job request section sends said job request (17, fig. 4) to said host

computer according to a condition of said print engine and said receive buffer memory (12, 15, fig. 4).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: a print engine, a receive buffer memory, and wherein the job request section sends said job request to the host computer according to a condition of the engine and the receive buffer memory.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer by the teaching of Nashi because of the following reasons: (a) it would have provided a hardware device/print engine to carry out the printing; (b) it would prevent the data from being lost by using a buffer; and (c) it would also prevent the host from sending print data to the printer while the printer is not capable of receiving any print data due to print engine error or memory full as suggested by Nishi, fig. 4.

Regarding claim 17: Gase teaches a step of receiving job location data (URL, column 3, line 20) lines showing a location of the job data (column 3, lines 27-28) from a print server (the computer that generates the URL message other than the computer where the print job resided, column 3, lines 18-21, column 3, lines 5-9; each client processor is a print server, column 3, lines 1-4, that serves the printer's request, column 1, lines 41-45, column 3, lines 25-30), wherein in the step of demanding, the job request (request, column 3, lines 26-27) is sent to the host computer (client processor, column 3, lines 28-30) which the job location data shows. (Column 3, lines 25-30)

Regarding claim 18: Gase teaches a step of receiving job location data (received URL, column 3, lines 17) showing a location of the job data (column 3, lines 25-30) from the host computer (client processor, column 3, line 27) and temporarily storing it, (since the print job is stored in the queue as URLs, column 3, lines 30-35, and the print job/URL in the queue would be canceled, column 4, lines 37-40, the storing of the URLs is temporarily) wherein, in the step of demanding, the job request is sent to the host computer which the stored job location data shows (column 3, lines 25-30).

6.   Claims 14, 15, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gase in view of Nishi as applied to claims 11, 16 above and further in view of Pipeline Corporation (column 1, lines 48-60, Gase).

Regarding claim 14: Gase does not teach wherein the job request section can specify a desired part of the job data for the host computer when the job request section sends the job request, and the printing section receives only the desired part of job data sent from the host computer in response to a request from the job request section and prints it.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: the job request section can specify a desired part of the job data for the host computer when the job request section sends the job request, and the printing section receives only the desired part of job data sent from the host computer in response to a request from the job request section and prints it.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Regarding claim 15: Gase does not teach the printer further comprising means which a location of each part constituting the job data is informed from the host computer, wherein the job request section can specify a desired part of the job data for the host computer based upon the informed location of each part when the job request section sends the job request, and the printing section receives only the desired part of the job data sent from the host computer in response to a request from the job request section and prints it.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided

into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: means/software code such that the printer would allow the location of each part constituting the job data to be informed from the host computer; the job request section can specify a desired part of the job data for the host computer based upon the informed location of each part when the job request section sends the job request, and the printing section receives only the desired part of the job data sent from the host computer in response to a request from the job request section and prints it.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Regarding claim 19: Gase does not teach wherein, in the step of demanding, a desired part of the job data can be specified for the host computer, and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: in the step of demanding, a desired part of the job data can be specified for the host computer, and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual

print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Regarding claim 20: Gase does not teach a step of being informed of a location of each part constituting the job data from the host computer, wherein, in the step of demanding, a desired part of the job data can be specified for the host computer based upon the informed location of each part, and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's method of operating a printer to include: a step of being informed of a location of each part constituting the job data from the host computer; in the step of demanding, a desired part of the job data can be specified for the host computer based upon the informed location of each part; and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's method of operating a printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Response to Arguments

7.   Applicant's arguments with respect to claims 11-20 have been considered but are moot in view of the new ground(s) of rejection.

Please see detailed office action.

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

July 29, 2006

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